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# FINANCIAL STATEMENTS

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Financial statements provide financial information needed to measure the financial performance of a business. A farmer or a lender cannot make intelligent decisions on the allocation and use of capital until he has adequate information about the past and current financial condition of his operation. Farmers need adequate records and financial statements to provide a reliable basis for judgment in managerial decisions. The most widely used financial statements are the balance sheet, the income statement, and the cash flow statement. A relatively new instrument, "The Statement of Change in Financial Position," is gaining increasing acceptance in the agricultural community. It has been required for firms which prepare statements in accordance with Generally Accepted Accounting Principles since 1971.

## THE BALANCE SHEET

A completed balance sheet shows financial position at a moment in time. It contains a summary of assets and liabilities of the business and a statement of the owner's equity or net worth. Most farm balance sheets contain both personal and business assets and liabilities. This is generally agreeable to lenders because they typically lend to the farmer and the business as one entity. One of the primary functions of the balance sheet is to show the margin by which debt obligations would be covered if the business were terminated and all assets were sold.

Balance sheets have traditionally had the assets on the left side and liabilities and net worth on the right. The balance sheet in Table 1 is an example of a balance sheet which incorporates many features of generally accepted accounting principles into a format which is generally suitable for farm owners. Assets are listed under current, intermediate, and fixed on the left. Liabilities are similarly listed as current, intermediate, and long term on the right. Much of the information on a balance sheet is a summary of accounting and other information. Note the frequent references to other schedules used to bring together and summarize detailed information before it is summarized on the balance sheet.

### Categorizing and Valuing Assets

Assets are resources which have value and are "owned" by the firm or person. Current assets represent cash and near cash items. Generally, they could be converted to cash without disrupting the business or they will either be used up or converted to cash during the year or normal operating cycle. Intermediate assets generally represent working assets that are useful to a business for more than a year but would typically be used up in 10 years or less. Machinery, equipment, and breeding stock are good examples of intermediate assets. Fixed assets are generally land, buildings, and some improvements which are expected to have a useful life beyond 10 years.

### Valuing Assets

One of the most difficult parts of balance sheet preparation is valuing assets. Generally accepted accounting practices require the use of a "cost basis" valuation. However, lenders generally also like to have a realistic estimate of current fair market value. The accounting profession has offered a partial solution to this problem by suggesting two column balance sheets for personal and single proprietorship balance

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sheets. Notice that the balance sheet in Table 1 contains a column for "modified cost" valuations and another column for "market value." This two-column, two-value approach results in a net worth on both a cost basis and on a current value basis.

The cost basis valuation is really a "modified cost basis." Under this approach identical values are used in both columns for all assets except for: (1) marketable bonds and securities in the current asset section, (2) machinery and equipment in the intermediate assets section, and (3) farm and non-farm real estate in the fixed asset section.

"Market value" is generally thought of as the price which would be arrived at by a willing buyer and a willing seller, neither being under pressure to buy or sell. The "modified cost" value is the original cost adjusted for depreciation and improvements. The modified cost value is generally the book value kept for income tax purposes. When assets are traded in for assets of higher value the modified cost basis of the newly acquired assets is generally the cost basis of the old item plus the cash difference paid.

## Liabilities

A liability is an obligation that exists at the date of the balance sheet. They are grouped into current, intermediate, and long-term categories on the basis of when the obligations are due. Current liabilities are generally existing obligations that are payable within the year or accounting period. Accounts and notes payable within the year are traditional current liabilities. The principal and account interest portion of long and intermediate term liabilities due within one year belongs in the current liability section. Interest, taxes, rents, and leases which accrued during the previous year or accounting period but which have not been paid or billed are also current liabilities.

Intermediate liabilites are obligations with an original maturity of one to ten years. Notes, sales, contracts, and life insurance policy loans generally fall into this intermediate classification. Long-term liabilities are those with an original maturity beyond 10 years. The principal and accrued interest due within one year on intermediate and long-term liabilities is reported in the current section. One must be careful to remove the amounts reported under current liabilities from the intermediate and long-term liabilities in order to avoid overstating the amount of debt.

## THE INCOME STATEMENT

The practice of calculating net farm income on a cash basis is almost universal in agriculture. Congress has provided that farmers may file their income tax returns on a cash basis. The tax return focuses on cash expenses, cash receipts, and an allowance for depreciation. Therefore, this is the only record information kept by many farmers.

However, cash basis income may vary dramatically from true net income. Thus, the cash basis generated net income figure is not an appropriate measure of business performance. Farmers and lenders have historically supplemented cash income figures with physical measures, such as yield per acre, pigs per litter, livestock gains per day, and pounds of milk per cow. These factors do affect income; however, they are not a good substitute for actual financial information.

## Matching Income and Expenses

An income statement is an attempt to match the revenues and expenses of a business for an accounting period. In an accrual accounting system, any increase in owner equity resulting from operation of a business is revenue. Any decrease in owner equity is called an expense. Net income is the difference between the two.

Under cash basis accounting, revenue and expenses are determined by the timing of payment. For example, if grain is produced but not sold there is no revenue. However, the expense of raising the grain would be deducted in the accounting period it was paid. This results in the expense being charged against one accounting period and the revenue counted in another. Thus, the revenue and expense are not "matched." An accrual (inventory) system of accounts must be used to calculate the net income for an accounting period.

Under accrual accounting it makes no difference when a sale occurs. The inventory of crops, livestock, fertilizer, supplies, etc., at the end of the year is identified, valued, and

TABLE 1

# BALANCE SHEET

☐ Personal
☐ Business
☐ Consolidated

Name _____
Address _____ Phone _____

As of _____, 19____

| ASSETS | | | | | | LIABILITIES AND NET WORTH | | |
|---|---|---|---|---|---|---|---|---|
| **Current Assets** | | | | | Modified Cost | Market Value | **Current Liabilities** | Modified Cost | Market Value |
| Cash (on hand) or in checking | | | | | $ | $ | Accounts payable: | | |
| Savings accounts & time certificates | | | | | | | Labor $ Feed & seed $ | | |
| Hedging account equity | | | | | | | Repairs Fert. & chem | | |
| Marketable bonds & securities (Sch. 1) | | | | | | | Storage Fuel & oil | | |
| Notes & accounts receivable (good) | | | | | | | Other Mach. hire | $ | $ |
| Livestock & poultry to be sold: | | | | | | | Medical & other personal | | |
| Kind | No. | Avg. Wt. | $/Unit | Value | | | Notes payable within 12 months (to whom, maturity, purpose) | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
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| | | | | | | | | | |
| | | | | | | | | | |
| Crops and feed: | | | | | | | Principal portion of longer term debts due within 12 months (Sch. 8): | | |
| Item | Quant. | Unit | $/Unit | Value | | | Intermediate | | |
| | | | | | | | Long term | | |
| | | | | | | | Estimated accrued interest on: | | |
| | | | | | | | Accounts $ Notes $ | | |
| | | | | | | | Intermediate liabilities $ | | |
| | | | | | | | Long term liabilities $ | | |
| | | | | | | | Estimated accrued tax liability: | | |
| | | | | | | | Property | | |
| Cash investment in growing crops: | | | | | | | Real estate | | |
| Crop | | Acres | $/Ac | Value | | | Employer payroll withholdings | | |
| | | | | | | | Income & Soc. Sec. | | |
| | | | | | | | Accrued rents & lease payments | | |
| | | | | | | | Other (including relatives) | | |
| Supplies (Sch. 2) | | | | | | | Contingent income tax liability: | | |
| Prepaid expenses | | | | | | | Current assets | | |
| Other | | | | | | | Marketable securities | | |
| **TOTAL CURRENT ASSETS** | | | | | $ | $ | **TOTAL CURRENT LIABILITIES** | $ | $ |
| **Intermediate Assets** | | | | | | | **Intermediate Liabilities (Sch. 8)** | | |
| Notes & accounts receivable (good) | | | | | $ | $ | (Principal due beyond 12 months) | | |
| Machinery, equipment, trucks (Sch. 9): | | | | | | | Notes payable | $ | $ |
| Cost or Basis $ | | | | | | | Sales contracts | | |
| Less accumulated dep $ | | | | | | | Life insurance policy loans | | |
| Breeding stock (Sch. 4) | | | | | | | Other | | |
| Retirement accounts (IRA, HR-10) | | | | | | | Contingent income tax liability: | | |
| Cash value of life insurance (Sch. 7) | | | | | | | Machinery | | |
| Securities not readily mktable (Sch. 1) | | | | | | | Breeding stock | | |
| Personal & recreational vehicles (Sch. 3) | | | | | | | Securities not readily mktable | | |
| Household goods & personal effects | | | | | | | Contingent income tax liability & interest penalty on retirement accts. | | |
| Other | | | | | | | | | |
| **TOTAL INTERMEDIATE ASSETS** | | | | | $ | $ | **TOTAL INTERMEDIATE LIABILITIES** | $ | $ |
| **Fixed Assets** | | | | | | | **Long Term Liabilities (Sch. 8)** | | |
| Contracts & notes receivable | | | | | $ | $ | (Principal due beyond 12 months) | | |
| Farm real estate (Sch. 5): | | | | | | | Mortgage on farm real estate | $ | $ |
| Cost or Basis $ | | | | | | | Land contracts | | |
| Less accumulated dep $ | | | | | | | Mortgage on non-farm real estate | | |
| Non-farm real estate (Sch. 6) | | | | | | | Other | | |
| Other | | | | | | | Contingent capital gains tax liability: | | |
| | | | | | | | Real estate | | |
| **TOTAL FIXED ASSETS** | | | | | $ | $ | **TOTAL LONG TERM LIABILITIES** | $ | $ |
| | | | | | | | **TOTAL LIABILITIES** | $ | $ |
| | | | | | | | **NET WORTH** | $ | $ |
| **TOTAL ASSETS** | | | | | $ | $ | **TOTAL LIABILITIES AND NET WORTH** | $ | $ |



TABLE 2

# INCOME STATEMENT

☐ Actual
☐ Projected

For 12 Month Period
Ending _____, 19____

Name _____

Address _____

**REVENUE**

| | | | |
|---|---|---|---|
| Crops and feed: | | | |
| cash sales | $ | (1a) | |
| Inventory change (Sch. 1) | (±) | (1b) | $ (1) |
| Livestock & poultry sold: | | | |
| cash sales | $ | (2a) | |
| Inventory change (Sch. 1) | (±) | (2b) | (2) |
| Breeding stock: | | | |
| cash sales | $ | (3a) | |
| Inventory change (Sch. 1) | (±) | (3b) | (3) |
| Products: livestock and poultry — cash sales | | | (4) |
| Custom work: cash | | | (5) |
| Government payments and patronage dividends | | | (6) |
| Income from hedging transactions (Sch. 2) | (±) | | (7) |
| Other | | | (8) |
| Adjustment in notes and accounts receivable (Sch. 1) | (±) | | (9) |
| Gross revenue (Add lines 1 thru 9) | $ | | (10) |
| Less livestock & poultry purchases (feeder & breeding) | (−) | | (11) |
| Less feed purchased | (−) | | (12) |
| VALUE OF FARM PRODUCTION | $ | | (a) |

**EXPENSES**

| | | | |
|---|---|---|---|
| Cash operating expenses (Sch. 3) | $ | | (13) |
| Expense adjustment (unused assets) (Sch. 4) | (±) | | (14) |
| Expense adjustment (unpaid items) (Sch. 5) | (±) | | (15) |
| Depreciation: | | | |
| Machinery and equipment | $ | (16a) | |
| Fixed farm improvements | $ | (16b) | (16) |
| Total operating expenses (Add lines 13 thru 16) | | | (b) |
| Income from farm operations | | (a−b) | $ (c) |
| Less interest expense (Sch. 6) | | (−) | |
| Gain or loss on disposal of farm assets (Sch. 7) | | (±) | |
| NET FARM INCOME | | | $ (d) |

**NON-FARM INCOME**

| | | | |
|---|---|---|---|
| Operator's wage off farm (net of expenses incurred) | $ | | (17) |
| Spouse's wage off farm (net of expenses incurred) | | | (18) |
| Interest and dividends (including int. on retirement accts.) | | | (19) |
| Gain or loss on sale of non-farm assets (Sch. 8) | (±) | | (20) |
| Net income — other farms | | | (21) |
| Net income — non-farm real estate | | | (22) |
| Other | | | (23) |
| NET NON-FARM INCOME (Add lines 17 thru 23) | | | $ (e) |
| Income before income taxes and extraordinary items | | (d+e) | $ (f) |
| Provision for income and Soc. Sec. taxes (all income) (Sch. 9) | | | (g) |
| Income before extraordinary items | | (f−g) | $ (h) |
| Extraordinary items (explain) | | | (i) |
| NET INCOME | | | $ |

compared with the inventories at the beginning of the year. If there is an increase in inventories, the amount of increase is revenue. The adjustment for inventories is illustrated on lines 1, 2, and 3 of the Income Statement shown in Table 2.

Similarly, expenses are recognized at the moment a service is rendered, or an obligation is generated by contract or actual acceptance of a product. However, expenses incurred in the production of items which have not been shown as revenue are not generally charged against the accounting period in which the expenses were recognized. Adjustments for expenses are made on lines 14 and 15 of the Income Statement in Table 2. The one exception to the general rules stated here is that in this particular income statement growing crops are not included in inventories until they are harvested.

### Income Statement Format

The Income Statement in Table 2 devotes the upper two-thirds of the statement to calculating net farm income and the lower portion to summarizing net non-farm income. These two sources of incomes are combined at the bottom to give income before taxes and extraordinary items. This income figure, less a provision for taxes and extraordinary items, gives net income.

### Revenue

Revenue is generated by both cash sales and changes in inventory. On the income statement shown, crops, market livestock, and breeding stock cash sales and inventory charges are shown separately. Supplementary schedules are used to keep track of separate enterprise and inventory changes. All livestock sales are reported as revenue, but livestock and feed purchases are subtracted (lines 11 and 12) in order to determine the value of farm production.

### Expenses

The expense section of this income statement separates operating expenses, financial expenses (interest), and gain or loss on the sale of capital assets. This separation makes it easier to compare the income statements of firms which are financed differently or which have disposed of large amounts of assets. The non-farm section shows only net revenue from outside the farm business. Combining the net farm income with the net non-farm income generates the income before taxes. It is important to deduct anticipated income taxes and any extraordinary items before arriving at net income.

## THE STATEMENT OF CHANGE IN FINANCIAL POSITION

A completed Statement of Change (Statement of Change in Financial Position) shows the changes in various balance sheet accounts during a period of time. It is a flow statement. The statement is usually divided into Sources of Funds and Uses (Applications) of Funds as shown in Table 3. The statement provides insight into investment and financing decisions made by business owners and/or management.

Sources of funds include:

(1) funds provided by operations,

(2) funds from gifts, inheritances or additional contributions by owners,

(3) funds provided by disposing of assets, and

(4) funds generated by increasing liabilities (borrowing).

The sources of funds which are used and the uses to which they are put can in conjunction with the other financial statements, tell a great deal about management strategies.

The possible applications (or uses) of funds are:

(1) withdrawals (e.g. family living expenses),

(2) gifts for estate planning purposes,

(3) increases in assets (investments), and

(4) decreases in liabilities (paying off debt).

Thus, the statement of change shows the flow of funds. This statement can be used to analyze past performances or analyze projections for the

Table 3

## STATEMENT OF CHANGE IN FINANCIAL POSITION

☐ Actual Name _____ Address _____

☐ Projected Date Completed _____, 19____ For 12 Month Period Ending _____, 19____

| SOURCES OF PURCHASING POWER | | APPLICATIONS OF PURCHASING POWER | | NET RESULTS |
|---|---|---|---|---|
| Net Income | $ | Net Withdrawals (Sch 1 2-10) | $ | |
| Add: Depreciation | | Add Gifts made for estate transfer | | |
| Losses | | | | |
| Subtract Gains | | | | |
| FUNDS PROVIDED BY OPERATIONS | $ | | | |
| Gifts and Inheritances Received | | | | |
| Additions to Paid In Capital | | | | |
| FUNDS FROM OPERATIONS & EXT CONTRIBUTIONS (a) | $ | WITHDRAWALS (d) | $ | GROWTH FUNDS a-d = $ (g) |
| Current Assets with Net Decreases | | Current Assets with Net Increases | | |
| Livestock & poultry to be sold (Sch 1) | $ | Livestock & poultry to be sold (Sch 1) | $ | |
| Crops & feed (sch 1) | | Crops & feed (Sch 1) | | |
| Total (Sch 2) | $ | Total (Sch 2) | $ | |
| Gross Decreases in Intermediate Assets | | Gross Increases in Intermediate Assets | | |
| Machinery & equipment sales | | Machinery & equipment purchases | | |
| Total (Sch 3) | | Total (Sch 3) | | |
| Gross Decreases in Fixed Assets | | Gross Increases in Fixed Assets | | |
| Farm real estate sales | | Farm real estate purchases | | |
| Total (Sch 4) | | Total (Sch 4) | | NET INVESTMENT |
| TOTAL DISINVESTMENT (b) | $ | TOTAL INVESTMENT (e) | $ | a-b = $ (h) |
| Current Liabilities with Net Increases | | Current Liabilities with Net Decreases | | |
| Accounts payable | $ | Accounts payable | $ | |
| Short term notes | | Short term notes | | |
| Current portion of term debt (Sch 1) | | Current portion of term debt (Sch 1) | | |
| Total (Sch 5) | $ | Total (Sch 5) | $ | |
| Gross Increases in Intermediate Liabilities | | Gross Decreases in Intermediate Liabilities | | |
| Notes | | Notes | | |
| Total (Sch 6) | | Total (Sch 6) | | |
| Gross Increases in Long Term Liabilities | | Gross Decreases in Long Term Liabilities | | |
| Mortgages on farm real estate | | Mortgages on farm real estate | | |
| Land contracts | | Land contracts | | NET CHANGE IN INDEBTEDNESS |
| Total (Sch 7) | | Total (Sch 7) | | |
| TOTAL NEW BORROWINGS (c) | $ | TOTAL DEBT REPAYMENT (f) | $ | f-c = $ (i) |
| TOTAL SOURCES (a + b + c) | $ | EQUAL TOTAL APPLICATIONS (d + e + f) | $ | (ACCURACY CHECK: g must = h+i) |



TABLE 4: **CASH FLOW STATEMENT**

☐ Projected for 19____

☐ Actual for 19____ Name _____ Address _____

Date completed _____, 19____

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Beginning cash balance (demand deposits plus currency) | | | | | | | | | |
| | **Operating Receipts:** | | | | | | | | | |
| 2 | Crops and feed | | | | | | | | | |
| 3 | Livestock and poultry | | | | | | | | | |
| 4 | Products: livestock and poultry | | | | | | | | | |
| 5 | Custom work | | | | | | | | | |
| 6 | Government payments and patronage dividends | | | | | | | | | |
| 7 | Hedging account withdrawals | | | | | | | | | |
| 8 | | | | | | | | | | |
| | **Capital Receipts:** | | | | | | | | | |
| 9 | Breeding stock | | | | | | | | | |
| 10 | Machinery and equipment | | | | | | | | | |
| 11 | | | | | | | | | | |
| | **Non-Farm Income:** | | | | | | | | | |
| 12 | Off-farm wages | | | | | | | | | |
| 13 | Interest and dividends | | | | | | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| | **TOTAL CASH AVAILABLE** (add lines 1 and 15) | | | | | | | | | |
| | **Operating Expenses:** | | | | | | | | | |
| 17 | Labor hired (including employer taxes) | | | | | | | | | |
| 18 | Repairs — machinery and equipment | | | | | | | | | |
| 19 | Repairs — buildings and improvements | | | | | | | | | |
| 20 | Rents and leases | | | | | | | | | |
| 21 | Seed | | | | | | | | | |
| 22 | Fertilizer and lime | | | | | | | | | |
| 23 | Chemicals | | | | | | | | | |
| | Custom machine hire | | | | | | | | | |
| 25 | Supplies | | | | | | | | | |
| 26 | Livestock expense (breeding, vet., etc.) | | | | | | | | | |
| 27 | Gas, fuel, oil | | | | | | | | | |
| 28 | Storage and custom drying | | | | | | | | | |
| 29 | Taxes (real estate and personal property) | | | | | | | | | |
| 30 | Insurance (property, liability, crop) | | | | | | | | | |
| 31 | Utilities (electricity, gas, telephone) | | | | | | | | | |
| 32 | Marketing and transportation expense | | | | | | | | | |
| 33 | Auto (farm share) | | | | | | | | | |
| 34 | | | | | | | | | | |
| 35 | | | | | | | | | | |
| 36 | Total Cash Operating Expenses | | | | | | | | | |
| | **Livestock and Feed Purchases:** | | | | | | | | | |
| 37 | Feeder livestock | | | | | | | | | |
| 38 | Breeding livestock | | | | | | | | | |
| 39 | Feed purchased | | | | | | | | | |
| | **Capital Expenditures:** | | | | | | | | | |
| 40 | Machinery and equipment | | | | | | | | | |
| 41 | Building and improvements | | | | | | | | | |
| 42 | | | | | | | | | | |
| | **Other Expenditures:** | | | | | | | | | |
| 43 | Hedging account deposits | | | | | | | | | |
| 44 | Gross family living withdrawals | | | | | | | | | |
| 45 | Non-farm business and investments | | | | | | | | | |
| 46 | Income tax and social security | | | | | | | | | |
| 47 | | | | | | | | | | |
| 48 | Intermediate and long term loan payments — principal | | | | | | | | | |
| 49 | — interest | | | | | | | | | |
| | **TOTAL CASH REQUIRED** (add lines 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49) | | | | | | | | | |
| 51 | **CASH AVAILABLE LESS CASH REQUIRED** (16-50) | | | | | | | | | |
| 52 | Inflows from savings | | | | | | | | | |
| 53 | Cash position before borrowing | | | | | | | | | |
| 54 | Money to be borrowed — operating loans | | | | | | | | | |
| | — intermediate and long term loans | | | | | | | | | |
| 55 | Operating loan payments — principal | | | | | | | | | |
| 56 | — interest | | | | | | | | | |
| 57 | Outflows to savings | | | | | | | | | |
| 58 | Ending cash balance | | | | | | | | | |
| | **Loan Balances:** (at end of period) | | | | | | | | | |
| 59 | Current year's operating loans | | | | | | | | | |
| | | | | | | | | | | |
| 60 | Previous year's operating loans | | | | | | | | | |
| | | | | | | | | | | |
| 61 | Intermediate and long term loans | | | | | | | | | |
| 62 | Total Loans | | | | | | | | | |
| | **Consistency Check:** | | | | | | | | | |
| 63 | Total inflows including borrowed money (16+52+54) | | | | | | | | | |
| 64 | Total outflows (50+55+56+57+58) | | | | | | | | | |
| 65 | Budgeting error (63-64) | | | | | | | | | |

future. Generally, a statement of change can only be put together after the preparation of the income statement and balance sheet for the accounting period being analyzed.

## THE CASH FLOW STATEMENT

A cash flow statement is a listing of all cash inflows and cash outflows for a period of time. Only cash items, either revenue or expenditures, are included. A cash flow generally includes both farm and non-farm items. That is, it includes farm operating and capital outlays as well as family living and tax payments.

Most cash flow statements are projections of anticipated cash flows for the next year. The annual projection is generally prorated by month (or by quarter) to reflect expectations on a monthly (quarterly) basis. Debt repayment commitments are a part of each month's outflow.

### Uses and Advantages

The preparation of a cash flow statement formalizes the entire planning process. It provides the "best estimate" of how a farmer or rancher plans to operate, and establishes definite expectations that become the framework for judging subsequent performance. It also provides the estimates necessary to prepare a projected income statement.

A word of caution is due here. A cash flow statement does not indicate whether a business is profitable. It does not consider inventory changes or depreciation, both of which affect profitability. In addition, it includes family consumption and withdrawals, neither of which affects profit. Profitability must be determined using an accrual basis income statement, not the cash flow statement.

A cash flow statement is generally used to evaluate borrowing (repayment plans). Both the lender and the farmer can review differences between budget projections and actual results and determine if changes are needed or future plans are affected. Thus, it becomes a "financial control" tool.

It can also be used to coordinate and integrate the objectives and plans of persons responsible for different enterprises or business operations. All the pieces of the business can be put together in one overall plan of operation so that those responsible for financial planning can arrange for the borrowing of needed cash and the investment of surpluses.

### Cash Flow Statement Format

A sample format for a cash flow statement is shown in Table 4. A person would generally need at least 6 to 14 columns depending on whether cash flow is being broken down on a quarterly or monthly basis. The extra two columns are generally used to show annual projected totals and last year's actual totals.

Each column in this cash flow statement begins with the projected beginning balance for the period (line 1) and ends with the projected ending cash balance for the period (line 58). Additional lines are provided near the bottom for keeping track of loan balances (lines 59-62). The consistency check at the bottom insures that total inflows equal total outflows and serves as a check for mathematical errors.

Operating receipts and expenses are shown in lines 2 through 36. This is followed by additional categories of expenditures for livestock and feed, capital items, and other. Total expenditures (cash required) are shown on line 50. The next line (51) is used to compare cash available and cash required.

If projected expenditures exceed projected receipts this indicates a need to bring in cash from savings, sell something, or make credit arrangements to finance the projected deficit. A projected surplus means that there may be funds for paying off existing debt or savings.

A cash flow statement should include both family and business outlays for capital requirements, as well as operating expenditures. All cash expenditures and cash receipts are to be included.

## IMPORTANT FINANCIAL RATIOS

The usefulness of financial ratios depends to a considerable degree on the availability of a reliable basis for comparison. For most farms the best basis for comparison is that farm's own previous year's financial ratios, prepared in a

consistent manner. The next best basis for comparison is financial ratios from "similar" farms prepared on a consistent basis. Basic record information on the most common types of farms in Ohio is summarized annually in Farm Business Analysis Reports prepared by the farm management staff of The Ohio State University Cooperative Extension Service. It is available through County Extension offices. This program is discussed in another pamphlet in this series.

## Basic Balance Sheet Ratios

The ability to make comparisons with other farms is not as critical with balance sheet ratios as with income statement ratios because balance sheet ratios have more significance in and of themselves.

A basic measure of short term financial condition is the current ratio, which indicates the extent to which current assets, if liquidated, would cover current debts outstanding.

$$\text{Current ratio} = \frac{\text{Total current assets}}{\text{Total current debt}}$$

Generally current assets should exceed current debt so that the ratio is above 1.0 and preferably 2 or above. However, there are no standards as to what is a good or minimum acceptable current ratio. This is also somewhat true of all other financial statement ratios. Moreover, the current ratio will vary a great deal throughout the year, so it is important that year-to-year comparisons be made as of the same data each year. Due to this seasonal variation, many analysts prefer to evaluate the current position using the quick (acid test) ratio which is the ratio of selected current assets (cash + net receivables + current marketable securities) to current liabilities.

The long-run liquidity position of a business is indicated by the debt to asset ratio.

$$\text{Debt to asset ratio} = \frac{\text{Total Debts}}{\text{Total Assets}}$$

The lower this ratio, the more "buffer" there is available to creditors and the owner(s) if the business ceases for whatever reason. Historically, this was the primary financial ratio upon which lenders relied when deciding whether to loan money to farm operators. However, in recent years lenders have found that a farm business could be in a sound equity position but still not be able to repay debt. There has been a definite increase in the use of financial ratios and other information from the Income Statement to supplement those from the Balance Sheet. Variations of the debt to asset ratio are the net capital ratio (= total assets/total debt) and the equity to value ratio (= owner equity/total assets). All three reflect the overall relationship of debt, equity and total assets.

## Basic Income Statement Ratios

There are several "expense to income" ratios which can be used to measure the margin by which the value of production exceeds production costs. The operating ratio, fixed ratio, and gross ratio are respectively the ratio of variable, fixed and total expense to gross income. These ratios only have meaning as compared to the same ratios computed for the same farm in previous years or as compared to other similar farms in the same year.

Variable expenses include expenses such as fuel, seed, fertilizer, and feed which are incurred because the farm operator chose to engage in the business of farming during a period of time. Fixed expenses generally include property taxes, real estate taxes, interest payments, depreciation insurance, and certain repairs. Fixed expenses are incurred even if the farm operator does not operate his farm. The total of variable and fixed expenses is total expenses.

Another important ratio which measures the efficiency with which capital is being employed in the business is the capital turnover ratio:

$$\text{Capital Turnover Ratio} = \frac{\text{Gross Income}}{\text{Average Investment}}$$

This ratio is subject to uncontrollable fluctuations due to price changes, but can be quite meaningful when compared with other similar farms for the same year.

## Conclusions

Financial statements and financial ratios provide useful information which is needed to measure the financial performance of today's agribusinesses. The most widely used financial statements are the balance sheet, the income statement,

and the cash flow statement. These statements and the relatively new "Statement of Change in Financial Position" are being increasingly relied on for decision making as the size and capital needs of today's agriculture continue their dramatic growth. The sample financial statements and related financial ratios should be useful to anyone who must consider the financial success of agri-businesses.

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